



PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

NEW SUBSPECIES OF BIRDS FROM OAXACA
(AVES: PHASIANIDAE, TURDIDAE, PARULIDAE)

BY ROBERT T. ORR AND J. DAN WEBSTER

*California Academy of Sciences, San Francisco, California
and Hanover College, Hanover, Indiana*

Southwestern Oaxaca is a region that shows considerable endemism as regards its avifauna. This has been pointed out by Phillips (1966), who recently described a number of new subspecies of birds from there. The most important geographical feature influencing this evolutionary trend is the Sierra de Miahuatlan, a southeastern extension of the Sierra Madre del Sur separated from the backbone of that range by the Rio Verde. The Valley of Oaxaca to the north, the Isthmus of Tehuantepec to the east, and the Pacific Ocean to the south further isolate this mountain system. In the course of preparing a report based on a year of continuous field work in this region, sponsored by the Western Foundation of Vertebrate Zoology, the American Museum of Natural History, and the California Academy of Sciences, several new subspecies of birds have been noted. Three of these are described here. The holotypes are all deposited in the collection of the California Academy of Sciences but the paratypes, unless otherwise indicated, have not yet been divided between the sponsoring institutions and the Mexican government.

We wish to thank Dr. Ned K. Johnson and Dr. Peter L. Ames for the use of certain pertinent specimens in the collection of the Museum of Vertebrate Zoology.

Family PHASIANIDAE

Colinus virginianus harrisoni new subspecies

Holotype: Adult male; no. 65512 California Academy of Sciences; 5.1 miles SW San Gabriel Mixtepec, 1,800 ft elevation, Oaxaca, Mexico;

8 May 1965; collected by Warren Rook; original no. 4277; wing 101 mm; weight 156.1 grams.

Geographic distribution: Known only from the vicinity of the type-locality.

Diagnosis: Male, similar to *Colinus v. atriceps* (Ogilvie-Grant) in having top of head, chin, and throat black and superciliary stripe essentially missing, but differing in that breast is chestnut, streaked with black, instead of being solid black. Female, similar to *C. v. atriceps*.

Measurements (in millimeters): Four adult males (including holotype) from type-locality: length of wing (chord), 101.5 (100–103); length of exposed culmen, 13.8 (13.5–14.5); length of tarsus, 27.8 (27.3–28.5). One adult female from type-locality: length of wing (chord), 101; length of exposed culmen, 14.0; length of tarsus, 29.8.

Weights (in grams): Three adult males from the type-locality, 151.7 (143–156.1); 1 adult female from the type-locality, 152.5.

Remarks: *Colinus virginianus* is one of the most geographically variable species of birds in North America. At least 15 subspecies are recognized as occurring in Mexico alone, and three of these are known from the state of Oaxaca. These are *C. v. atriceps*, known only from Putla, the type-locality; *C. v. thayeri* Bangs and Peters from northeastern Oaxaca; and *C. v. coyolcos* (P. L. S. Müller) from the lower Pacific slope of extreme eastern Oaxaca and western Chiapas. *C. v. thayeri* is one of the white-throated races. *C. v. coyolcos* has the black essentially restricted to the head and throat and a narrow white stripe on either side of the head. The syntypes of *C. v. atriceps* were examined by one of us (Orr) in the British Museum (Natural History) in the summer of 1966, and the male differs from *C. v. harrisoni* in having the chest solid black instead of streaked.

Specimens examined: The holotype and 4 paratypes (3 males and 1 female) from the type-locality.

Etymology: Named in honor of Ed N. Harrison of the Western Foundation of Vertebrate Zoology, Los Angeles, California.

Family TURDIDAE

***Turdus assimilis oaxacae* new subspecies**

Holotype: Adult female, no. 65513 California Academy of Sciences; Jamaica Junction, 4 miles N San Gabriel Mixtepec, 2,400 ft elevation, Oaxaca, Mexico; 20 November 1964; collected by J. Stuart Rowley, original no. 3498; wing 119 mm, weight 79 grams.

Geographic distribution: Southern Oaxaca and the state of Guerrero.

Diagnosis: Differs from both *Turdus a. assimilis* Cabanis and *T. a. lygrus* Oberholser in being more olivaceous, slightly darker, and less brown dorsally, as well as more olivaceous on breast and flanks, also darker than *lygrus* on breast and flanks. As contrasted with *T. a. leucauchen* Sclater, *oaxacae* is paler and more olivaceous dorsally as well as more olivaceous on breast and flanks. Eye ring orange in life as in

assimilis and *lygrus* (*vide* notes and annotation on labels by J. S. Rowley), not lemon yellow as in *leucauchen*.

Measurements (in millimeters): Three adult males from the Sierra de Miahuatlan: length of wing (chord), 127 (124–130); length of tail, 95.8 (93.7–97.8); length of exposed culmen (2 averaged), 17.6 (16.7–18.5); length of tarsus, 30.9 (30.7–31.3). Three adult females from the Sierra de Miahuatlan: length of wing (chord), 125 (122–127); length of tail, 98.1 (94.5–101); length of exposed culmen, 18.0 (16.8–19.8); length of tarsus, 31.3 (29.4–33.9).

Weights (in grams): Two adult males from the Sierra de Miahuatlan, 82.7 and 69.5; 3 adult females from the Sierra de Miahuatlan, 80.8 (79.0–86.7).

Remarks: *Turdus assimilis* was revised by Miller and Griscom (1925). Since then Moore (1937) described *T. a. renominatus* from southern Sinaloa. This was synonymized under *T. a. lygrus* in the Mexican Check-list II (Miller et al., 1957). The range of *lygrus* was given as from Sinaloa south to Oaxaca and east to Morelos.

The subspecies *lygrus*, as we now conceive it, ranges from Morelos to Jalisco and north to central Sinaloa. A single specimen from Colima is intermediate between *lygrus* and *oaxacae*. The ranges of *assimilis* and *leucauchen* remain as stated in the Mexican Check-list II save that the former is extended slightly south to central Oaxaca, on the basis of single specimens from Cerro San Felipe and Progreso, and the latter is extended slightly southwest to Cerro Baul in extreme eastern Oaxaca on the basis of four specimens.

Foxing is severe in skins of this species but virtually all of the specimens examined in the present study were collected since 1949.

Specimens examined: Thirty-one non-juvenals including the holotype and 30 paratypes: Guerrero: Omilteme, 22 (4 in Calif. Acad. Sci. collection, 18 in Mus. Vert. Zool.); Oaxaca: Cerro Verde, 30 km E Santa Rosa (Lachao Nuevo), 8,600 ft, 5; Jamaica Junction, 4 mi. N San Gabriel Mixtepec, 2,400 ft, 1; 9 mi. W San Gabriel Mixtepec, 2,600 ft, 1; 5.1 mi. SW San Gabriel Mixtepec, 1,800 ft, 1; Sinai, 10 km E Nopala, 7,200 ft, 1.

Etymology: Named after the Mexican State of Oaxaca.

Family PARULIDAE

***Ergaticus ruber rowleyi* new subspecies**

Holotype: Immature male (skull not fully ossified); no. 65514 California Academy of Sciences; 30 km E Lachao Nuevo, 8,600 ft elevation, Oaxaca, Mexico; 27 October 1964; collected by Warren Rook; original no. 3953; wing 62 mm; weight 8.6 grams.

Geographic distribution: High mountains of Guerrero and southern Oaxaca.

Diagnosis: Brighter red throughout than either *Ergaticus r. ruber* (Swainson) or *E. r. melanauris* Moore with auriculars silvery as in *ruber*. Color of dorsum bright Ruby (Palmer and Reilly, 1956) rather than off

Ruby in direction of Rose as in *ruber*, or off Ruby in direction of Scarlet as in *melanauris*.

Measurements (in millimeters): Four males (including the holotype) from the Sierra de Miahuatlan: length of wing (chord), 62.5 (61–64); length of tail, 56.2 (55.8–60.6); length of exposed culmen, 7.4 (7.1–7.7); length of tarsus, 18.3 (17.2–19). Four adult females from the Sierra de Miahuatlan: length of wing (chord), 59.5 (57–62); length of tail, 55.8 (53.2–58.3); length of exposed culmen (3 specimens), 7.6 (7.3–7.8); length of tarsus, 17.5 (17.0–18.7).

Weights (in grams): One adult male from the Sierra de Miahuatlan, 8.9; 4 adult females from the Sierra de Miahuatlan, 8.6 (8.4–9.0).

Remarks: We have examined two specimens of *Ergaticus ruber* from Durango, an adult from 15 miles west of El Salto, and a juvenile from Cerro Huehuento. Both confirm the race *melanauris* described by Moore (1937) from Chihuahua and Sinaloa. The adult has the characters ascribed to *melanauris* by Moore; the bird in juvenal plumage has the auriculars metallic brown in contrast to the silvery color of comparable specimens of *ruber*. Specimens examined from Morelos, Michoacan, and Distrito Federal represent the typical race *ruber*.

It might be expected that the population of *Ergaticus ruber* in southern Oaxaca would show some similarities to *E. versicolor* (Salvin) of Central America. Comparison of specimens from Oaxaca with a series from the vicinity of San Cristobal, Chiapas, fails to indicate this. The pink "frosting" anteriorly and the black auriculars of *E. versicolor* are not exhibited to any degree by any specimens of *E. ruber*.

Specimens examined: Eighteen, including the holotype and 17 paratypes, as follows: Guerrero: Omilteme, 6 (1 Calif. Acad. Sci., 5 Mus. Vert. Zool.); Cuapongo, 1 (Mus. Vert. Zool.); Oaxaca: 30 km E Lachao Nuevo, 8,600 ft, 1; Rio Molina, 7,300 ft, 10.

Etymology: Named after J. Stuart Rowley, Research Associate, California Academy of Sciences.

LITERATURE CITED

- MILLER, A. H., FRIEDMANN, H., GRISCOM, L. AND MOORE, R. T. 1957. Distributional check-list of the birds of Mexico. Part II. Pacific Coast Avif., no. 33, 436 p., 7 pls.
- MILLER, W. DEW. AND GRISCOM, L. 1925. Further notes on Central American birds, with descriptions of new forms. Amer. Mus. Novit. 184: 1–16.
- MOORE, R. T. 1937. Four new birds from northwestern Mexico. Proc. Biol. Soc. Wash., 50: 95–102.
- . 1937. New races of *Myadestes*, *Spizella* and *Turdus* from northwestern Mexico. Proc. Biol. Soc. Wash. 50: 201–206.
- PALMER, R. S. AND REILLY, E. M., JR. 1956. A concise color standard. Amer. Ornith. Union, Albany, N. Y. 8 p., color chart.
- PHILLIPS, A. R. 1966. Further systematic notes on Mexican birds. Bull. British Ornith. Club 86: 86–94, 1 fig.